For: ~~Jan Delaval~~ Paul

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

SEARCH REQUEST FORM

115013

Requestor's Name: Sabiha Qazi   Serial Number: 09/982,018

Date: 2/24/04   Phone: 2016.22   Art Unit: 1616

Priority Oct 2001

Search Topic: Mail Box 4C70 Off 4A45

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Inventor — HUANG, Dong et al.

Please search for ~~[illegible]~~ Sapogenin of ~~[illegible]~~ (dammarane) of cl 27 + 34.

cls 27-34 need to be examined.

Please see attached sheets

Thank you

STAFF USE ONLY

Date completed:		**Search Site**		**Vendors**	
Searcher:			STIC		IG Suite
Terminal time:			CM-1	57016	STN
Elapsed time:	3/3		Pre-S		Dialog
CPU time:	3/3	**Type of Search**			APS
Total time:	20		N.A. Sequence		Geninfo
Number of Searches:	20		A.A. Sequence		SDC
Number of Databases:		1	Structure		DARC/Questel
			Bibliographic		Other

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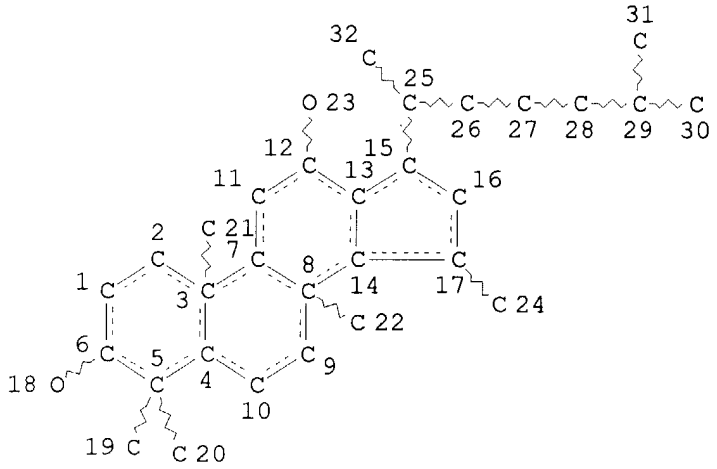
L1 STR



closest match

NODE ATTRIBUTES:
CONNECT IS E1 RC AT 23
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 32

STEREO ATTRIBUTES: NONE
L3 1 SEA FILE=REGISTRY SSS FUL L1
L4 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

=> d ibib abs hitstr

L4 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1966:473760 HCAPLUS
DOCUMENT NUMBER: 65:73760
ORIGINAL REFERENCE NO.: 65:13793a-f
TITLE: Chemical studies on oriental plant drugs. XIV. Protopanaxadiol, a genuine sapogenin of ginseng saponins
AUTHOR(S): Shibata, Shoji; Tanaka, Osamu; Ando, Toshio; Sado, Masako; Tsushima, Susumu; Ohsawa, Tomihiko
CORPORATE SOURCE: Univ. Tokyo
SOURCE: Chemical & Pharmaceutical Bulletin (1966), 14(6), 595-600
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB cf. CA 59, 10173b. The crude saponin mixt. of ginseng roots was shown to be a mixt. of about 12 saponins by thin layer chromatography (TLC). By preparative TLC 1 g. of the saponin mixt. finally gave 105 mg. ginsenoside-Rc, m. 192-4.degree., 150 mg. ginsenoside-Rb1, m.

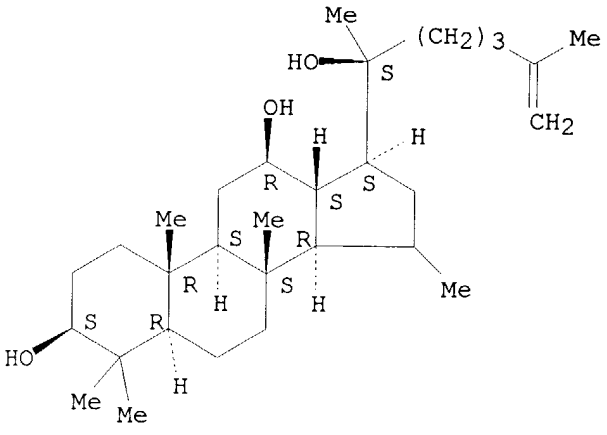
197-200.degree. (decompn.), and 120 mg. ginsenoside Rb2, m. 198-201.degree. (decompn.). The hydrolysis of the crude saponins or the 3 isolated saponins with dil. HCl all gave panaxadiol which should be represented as in I and not as in the previous paper (loc. cit.). However, when 3 g. mixt. was treated with concd. HCl at room temp. overnight, it gave 250 mg. chloro compd. (II), m. 219-20.degree.. II was identical with the chloride prepd. from .alpha.-panaxin (prosapogenin mixt. of the mixed saponins) by the method of Kotake (CA 25, 3439). A soln. of 160 mg. II in 3 ml. PhNEt2 and 15 ml. xylene was refluxed 10 hrs. to give 50 mg. III, m. 236-8.degree., [.alpha.]D 20.5.degree. (c 1.03, CHCl3). Similarly, a soln. of 9 g. II and 10 g. tert-BuOK in 500 ml. tert-BuOH and 800 Me2SO on heating at 75.degree. for 3.5 hrs. gave 5 g. III. Dehydrochlorination also took place on a column of silica gel. III had a free and a H-bonded OH group. Acetylation of III gave 90% yield of a diacetate, m. 125-7.degree., [.alpha.]D -5.6.degree. (c 1.03, CHCl3) which still showed an independent OH group in its ir spectrum. The N.M.R. spectrum of III showed that it contained a Me group on a completely substituted C-atom which also carried an OH group. Hydrolysis of 250 mg. III in 7 ml. HCl, 15 ml. EtOH, and 15 ml. H2O gave 50 mg. I. Catalytic hydrogenation of 200 mg. III in EtOH-AcOEt mixt. in the presence of 50 mg. Adams catalyst gave the dehydro deriv., m. 246-8.degree.. In the previous paper III was named protopanaxadiol and assigned the structure IIIa. However, detailed examn. of N.M.R. spectrum of III showed that it was a mixt. of IIIa and IIIb. On this basis and its N.M.R. spectrum II was given the represented structure. Hydrogenation of 2 g. of sapogenin mixt. as III also gave 350 mg. of the dihydro deriv. of III after acid hydrolysis. Acetylation of .alpha.-panaxin followed by catalytic hydrolysis also gave dehydro deriv. of III but no I.

IT **7755-51-3**, Dammar-25-ene-3.beta.,12.beta.,20-triol
(prepn. of)

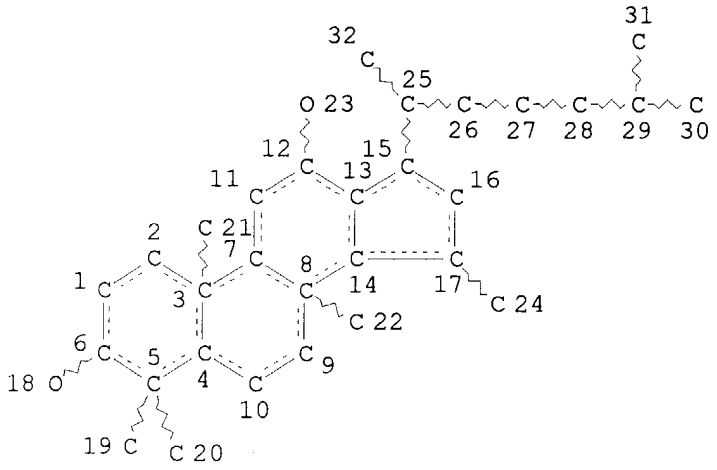
RN 7755-51-3 HCAPLUS

CN Dammar-25-ene-3.beta.,12.beta.,20-triol (7CI, 8CI) (CA INDEX NAME)

Absolute stereochemistry.



L1 STR



NODE ATTRIBUTES:
CONNECT IS E1 RC AT 23
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 32

STEREO ATTRIBUTES: NONE
L7 2 SEA FILE=MARPAT SSS FUL L1
L8 1 SEA FILE=MARPAT ABB=ON PLU=ON L7/COM

=> **d ibib ab qhit**

L8 ANSWER 1 OF 1 MARPAT COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 133:350394 MARPAT
TITLE: Preparation of steroid derivatives
INVENTOR(S): Liao, Shutsung; Song, Ching
PATENT ASSIGNEE(S): Arch Development Corporation, USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066611	A1	20001109	WO 2000-US11243	20000427

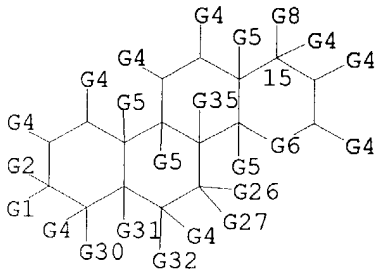
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

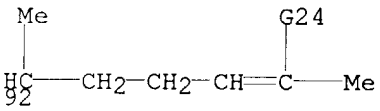
EP 1189922	A1	20020327	EP 2000-928431	20000427
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000010197	A	20020716	BR 2000-10197	20000427
JP 2002543216	T2	20021217	JP 2000-615640	20000427
NO 2001005314	A	20011227	NO 2001-5314	20011030
ZA 2001009793	A	20030228	ZA 2001-9793	20011128
PRIORITY APPLN. INFO.:			US 1999-131728P	19990430
			US 2000-191864P	20000324
			WO 2000-US11243	20000427

AB The steroid derivs. I (R3 = H, amino, carboxyl, oxo, halo, sulfonic acid, -O-sulfonic acid, or alkyl that is optionally inserted with -NH-,-N(alkyl)-, -O-, -S-, -SO-, -SO2-, -O-SO2-, -SO2-O-, -O-SO3-, -SO3-O-, -CO-, -CO-O-, -O-CO-, -CO-NH-, -CO-N(alkyl)-, -NH-CO-, or -N(alkyl)-CO-, and further optionally substituted with hydroxy, halo, amino, carboxyl, sulfonic acid, or -O-sulfonic acid),. R1, R2, R4, R4', R6, R7, R11, R12, R15, R16, and R17', independently, is H, hydroxy, amino, carboxyl, oxo, halo, sulfoic acid, -O-sulfonic acid, or alkyl that is optionally inserted with -NH-, -N(alkyl)-, -O-, -S-, -SO-, -SO2-, -O-SO2-, -SO2-O-, -O-SO3-, -SO3-O-, -CO-, -CO-O-, -O-CO-, -CO-NH-, -CO-N(alkyl)-, -NH-CO-, or -N(alkyl)-CO-, and further optionally substituted with hydroxy, halo, amino, carboxyl, sulfonic acid, or -O-sulfonic acid. R5, R8, R9, R10, R13, and R14, independently, is H, alkyl, haloalkyl, hydroxyalkyl, alkoxy, hydroxy, or amino; R17 is -X-Y-Z, in which X is a bond, or alkyl or alkenyl, optionally inserted with -NH-, -N(alkyl)-, -O-, or -S-, and further optionally forming a cyclic moiety with R16 and the 2 ring carbon atoms to which R16 and R17 are bonded; Y is -CO-, -SO-, -SO2-, -O-SO2-, -SO2-O-, -O-SO3-, -SO3-O-, -CO-O-, -O-CO-, -CO-NH-,-CO-N(alkyl)-, -NH-CO-, -N(alkyl)-CO-, or a bond. Z = alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, aralkyl, or heteroaralkyl, and is optionally substituted with hydroxy, alkoxy, amino, halo, sulfonic acid, -O-sulfonic acid, carboxyl, oxo, alkyloxycarbonyl, alkylcarbonyloxy, alkylaminocarbonyl, alkylcarbonylamino, alkylcarbonyl, alkylsulfinyl, alkylsulfonyl, or alkylthio; or is -CH(A)-B with A being a side chain of an amino acid, and B being hydrogen, -NRaRb, or -COORc wherein each of Ra, Rb, and Rc, independently, is hydrogen or alkyl; n is 0, 1, or 2. Provided that when Z is substituted with carboxyl or alkyloxycarbonyl, Y is a bond and either X or Z contains at least one double bond, and that when Y is a bond, either X is -NH-alkyl, -NH-alkenyl, -N(alkyl)-alkyl-, -N(alkyl)-alkenyl-, -O-alkyl-, -O-alkenyl-, -S-alkyl-, or -S-alkenyl-; or Z is substituted with halo, sulfonic acid, -O-sulfonic acid, alkylsulfinyl, or alkylsulfonyl, or is alkenyl or their salts were prepd. Thus, to a stirred soln. of L- (or D-) phenylalanine ester hydrochloride in dry DMF was added triethylamine and the mixt. was stirred at room temp. for 10 min, bile acid and 1-ethyl-3-[3-dimethylaminopropyl]-carbodiimide were then added and the suspension was stirred at room temp. overnight. Reaction mixt. was dild. with water and Et acetate, the org. layer was sepd. and the water layer was extd. with Et acetate again, the combined org. layer was then washed with 1N HCl, water, 1N NaOH and water, and dried (MgSO4), removed the solvent under reduced pressure to afford the steroid derivs., e.g. II. Steroid derivs. of I interact with nuclear liver X receptor (LXR) and ubiquitous receptor (UR), and can be used to treat a variety of LXR- or UR- mediated disorders.

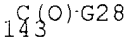
MSTR 1A



G1 = OH
G4 = OH / CO2H
G5 = Me
G8 = 92



G24 = 143



G30 = CO2H
G35 = Me
MPL: claim 1
NTE: additional derivatization also claimed
NTE: substitution is restricted
NTE: or salts
NTE: also incorporates claims 18, 35 and 49

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

INVENTOR SEARCH

L18 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:355832 HCAPLUS
DOCUMENT NUMBER: 138:362651
TITLE: **Novel** dammarane sapogenins, their use as anti-cancer agents, and a process for producing same
INVENTOR(S): **Huang, Dong; Qi, Dong Feng**
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. Ser. No. 910,887.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003087836	A1	20030508	US 2001-982018	20011019
US 2003087835	A1	20030508	US 2001-910887	20010724
WO 2003010182	A1	20030206	WO 2002-CA1173	20020724

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

BR 2002005792	A	20030722	BR 2002-5792	20020724

PRIORITY APPLN. INFO.:
US 2001-910887 A2 20010724
US 2001-982018 A 20011019
WO 2002-CA1173 W 20020724

OTHER SOURCE(S): MARPAT 138:362651

AB This invention relates to a group of novel sapogenins, their use in anticancer applications, and to a process for their prodn. More particularly, this invention pertains to a novel group of dammarane sapogenins, PAM-120, PBM-110 and PBM-100 (the dammarane sapogenin structure is specifically clean of any sugar moieties (glycons) at any position and hydroxyl at C-20) and PAN-20 and PAN-30 (the dammarane sapogenin structure has sugar moieties but is free of hydroxyl at C-20), obtained by chem. cleavage of dammarane saponins. The invention also includes a novel application of the said sapogenins for anticancer treatment by using them sep. or together, and/or jointly with other drugs, as well as to the process of producing these novel sapogenins. Said novel dammarane sapogenins show surprising anticancer effect when applied, particularly against multidrug resistant cancers.

IC ICM A61K031-704
ICS C07J001-00; C07J009-00; A61K031-56
NCL 514026000; 514182000; 536005000; 552540000
CC 1-6 (Pharmacology)
Section cross-reference(s): 11, 63
ST Ginseng dammarane sapogenin isolation antitumor resistance
IT Drug resistance

(antitumor; isolation of dammarane sapogenins and their use as anticancer agents)
IT Saponins
RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(dammarane, aglycons; isolation of dammarane sapogenins and their use as anticancer agents)
IT Sapogenins
RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(dammarane; isolation of dammarane sapogenins and their use as anticancer agents)
IT Antitumor agents
Drug delivery systems
Ginseng (Panax notoginseng)
Ginseng (Panax pseudoginseng)
Ginseng (Panax quinquefolium)
Human
Multidrug resistance
Neoplasm
(isolation of dammarane sapogenins and their use as anticancer agents)
IT Metal alkoxides
RL: RCT (Reactant); RACT (Reactant or reagent)
(isolation of dammarane sapogenins and their use as anticancer agents)
IT Antitumor agents
(resistance to; isolation of dammarane sapogenins and their use as anticancer agents)
IT 174688-80-3P, PAM-110 364779-14-6P, PAN-20 494753-66-1P, PAM-120
494753-67-2P, PbM-100 494753-69-4P, PAN-30
RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(isolation of dammarane sapogenins and their use as anticancer agents)

L18 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:97432 HCAPLUS
DOCUMENT NUMBER: 138:133977
TITLE: Process for producing **novel** dammarane sapogenins and their use as anticancer agents
INVENTOR(S): **Huang, Dong; Qi, Dong Feng**
PATENT ASSIGNEE(S): Panagin Pharmaceuticals Inc., Can.
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003010182	A1	20030206	WO 2002-CA1173	20020724

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003087835	A1	20030508	US 2001-910887		20010724
US 2003087836	A1	20030508	US 2001-982018		20011019
BR 2002005792	A	20030722	BR 2002-5792		20020724
PRIORITY APPLN. INFO.:			US 2001-910887	A	20010724
			US 2001-982018	A	20011019
			WO 2002-CA1173	W	20020724

OTHER SOURCE(S): MARPAT 138:133977
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention relates to a group of novel dammarane sapogenins, such as I [R1 = H, glc, glc(1.fwdarw.2)glc; R2 = H, OH; R3 = Me, CH2], their use in anticancer applications, and to a process for their prodn. from ginseng. More particularly, this invention pertains to a novel group of dammarane sapogenins, PAM-120 I (R1, R2 = H; R3 = CH2; dashed bond = double bond), PBM-110 II (R1 = H; R2 = OH) and PBM-100 (III) (the dammarane sapogenin structure is specifically clean of any sugar moieties at any position and hydroxyl at C-20), and PAN-20 I [R1 = .beta.-D-glucopyranosyl; R2 = H; R3 = CH2; dashed bond = double bond] and PAN-30 II [R1 = .beta.-D-glucopyranosyl(1.fwdarw.2) .beta.-D-glucopyranosyl; R2 = H] (the dammarane sapogenin structure has sugar moieties but is free of hydroxyl at C-20), obtained by chem. cleavage of dammarane saponins. A novel application of I-III for anti-cancer treatment by using them sep. or together, and/or jointly with other drugs, particularly against multi-drug resistant cancers.

IC ICM C07J017-00
ICS A61P035-00

CC 11-1 (Plant Biochemistry)
Section cross-reference(s): 1, 17, 30, 33, 63

ST dammarane sapogenin prepn anticancer glycoside; ginseng saponin dammarane hydrolysis sapogenin prepn

IT Drug delivery systems
(aerosols; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Metal alkoxides
RL: RGT (Reagent); RACT (Reactant or reagent)
(alkali metal; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Alkali metal compounds
RL: RGT (Reagent); RACT (Reactant or reagent)
(alkoxides; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(capsules; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Triterpenes

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(dammarane; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(drops; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(emulsions; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(enemas; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Ginsenosides
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(ext.; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Silica gel adsorbents
(for column chromatog.; for purifying dammarane sapogenins)

IT Liquid chromatography
(for purifying dammarane sapogenins)

IT Triterpenes
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(glycosides, dammarane; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(granules; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Apoptosis
(in cancer cells; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Beverages
(lemonade; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(liniments; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(liqs.; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(lotions; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Neuroglia, neoplasm
(malignant, treatment; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Sarcoma
(murine, treatment; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(ointments; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT Drug delivery systems
(pastes; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Drug delivery systems
(powders; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Antitumor agents
Ginseng (Panax)
Ginseng (Panax notoginseng)
Ginseng (Panax pseudoginseng)
Ginseng (Panax quinquefolium)
Human
(process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Triterpenes
RL: IMF (Industrial manufacture); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(sapogenins; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Drug delivery systems
(solns.; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Drug delivery systems
(suppositories; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Drug delivery systems
(suspensions; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Drug delivery systems
(syrups; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Drug delivery systems
(tablets; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Mammary gland, neoplasm
Melanoma
Neoplasm
(treatment; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Glycosides
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(triterpenoid, dammarane; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT Sapogenins
RL: IMF (Industrial manufacture); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(triterpenoid; process for producing dammarane sapogenins from ginseng and their use as anticancer agents)
IT 174688-80-3P, PAM 110 364779-14-6P, PAN 20 494753-66-1P, PAM 120
494753-67-2P, PBM 100 494753-69-4P, PAN 30
RL: IMF (Industrial manufacture); NPO (Natural product occurrence); PAC

(Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT 64-17-5, Ethanol, uses
RL: NUU (Other use, unclassified); USES (Uses)
(process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

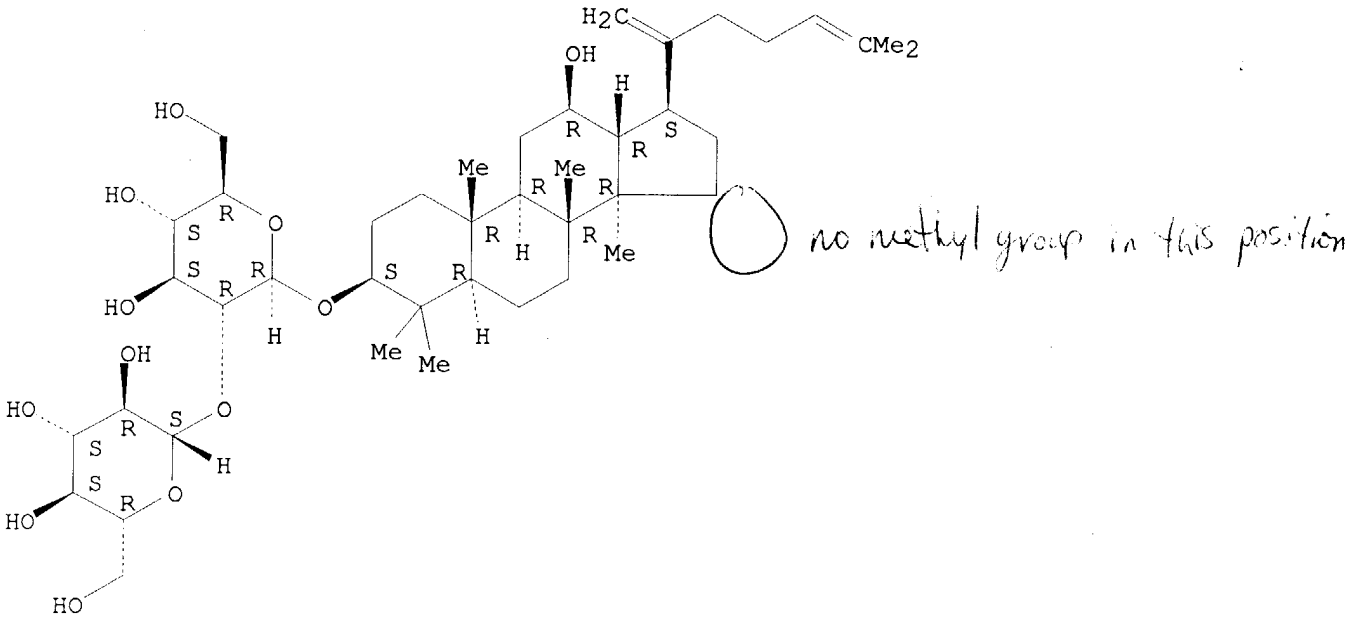
IT 15663-27-1, Cisplatin 33069-62-4, Taxol
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

IT 1310-58-3, Potassium hydroxide, reactions 1310-73-2, Sodium hydroxide, reactions
RL: RGT (Reagent); RACT (Reactant or reagent)
(process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 1 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **494753-69-4** REGISTRY
CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.)-12-hydroxydammara-20,24-dien-3-yl 2-O-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3.beta.,12.beta.-Dihydroxydammar-20(21),24-diene-3-O-.beta.-D-glucopyranosyl(1.fwdarw.2)-.beta.-D-glucopyranoside
CN Ginsenoside Rk1
CN PAN 30
FS STEREOSEARCH
MF C42 H70 O12
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

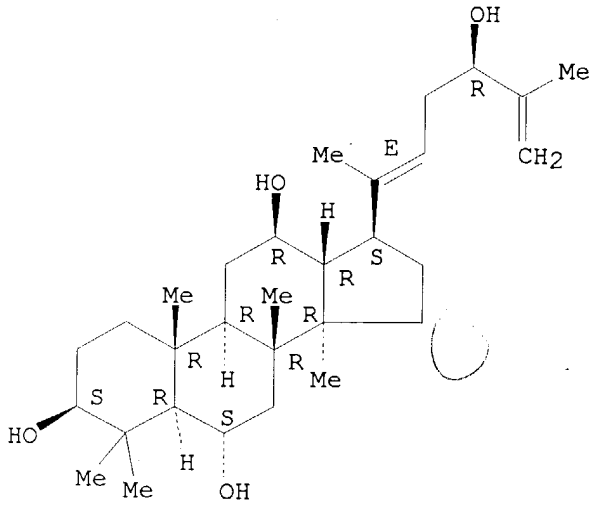
Absolute stereochemistry. Rotation (+).



6 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **494753-67-2** REGISTRY
CN Dammara-20(22),25-diene-3,6,12,24-tetrol, (3.beta.,6.alpha.,12.beta.,20E,24R)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN PBM 100
FS STEREOSEARCH
MF C30 H50 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.
Double bond geometry as shown.

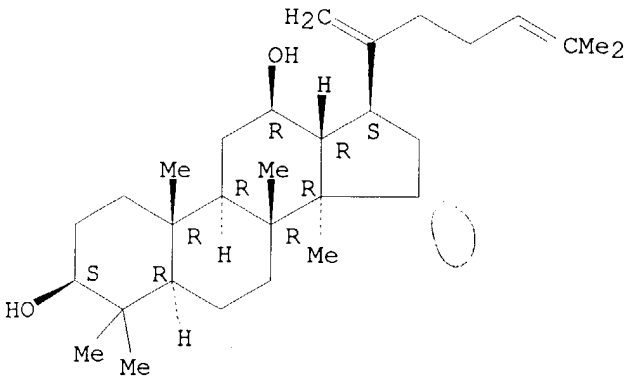


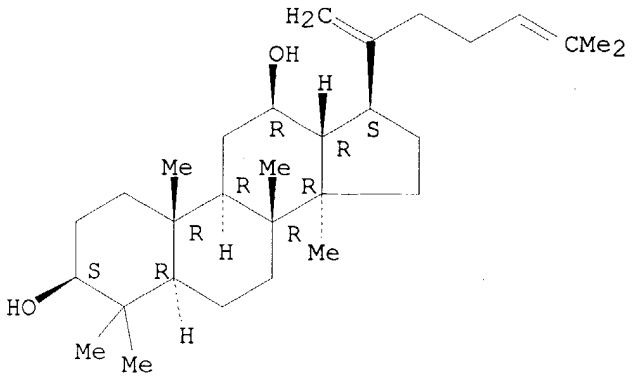
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 3 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **494753-66-1** REGISTRY
CN Dammara-20,24-diene-3,12-diol, (3.beta.,12.beta.)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN PAM 120
FS STEREOSEARCH
MF C30 H50 O2
SR CA
LC STN Files: CA, CAPLUS, IMSDRUGNEWS, IMSRESEARCH, TOXCENTER, USPATFULL

Absolute stereochemistry.



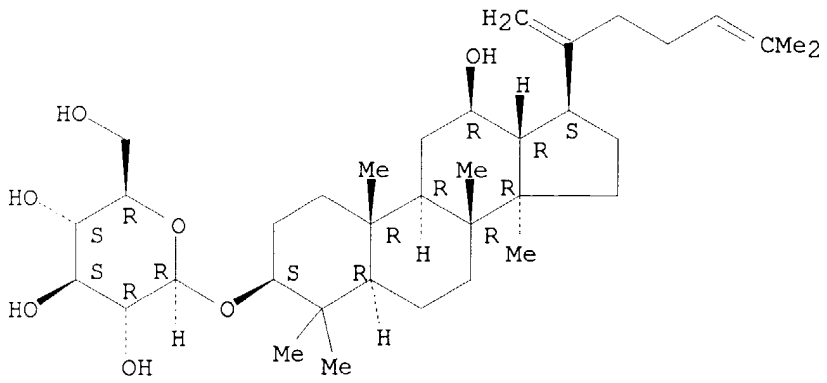


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 4 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **364779-14-6** REGISTRY
CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.)-12-hydroxydammara-20,24-dien-3-yl (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3.beta.,12.beta.-Dihydroxydammar-20(21),24-diene-3-O-.beta.-D-glucopyranoside
CN Ginsenoside Rk2
CN PAN 20
FS STEREOSEARCH
DR 494753-68-3
MF C36 H60 O7
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry. Rotation (+).



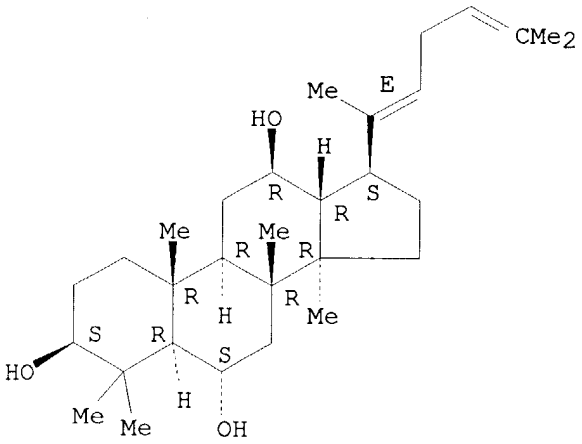
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)

7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 5 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **174688-80-3** REGISTRY
CN Dammara-20(22),24-diene-3,6,12-triol, (3.beta.,6.alpha.,12.beta.,20E)-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN PAM 110
CN Quasiprotopanaxatriol
FS STEREOSEARCH
MF C30 H50 O3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



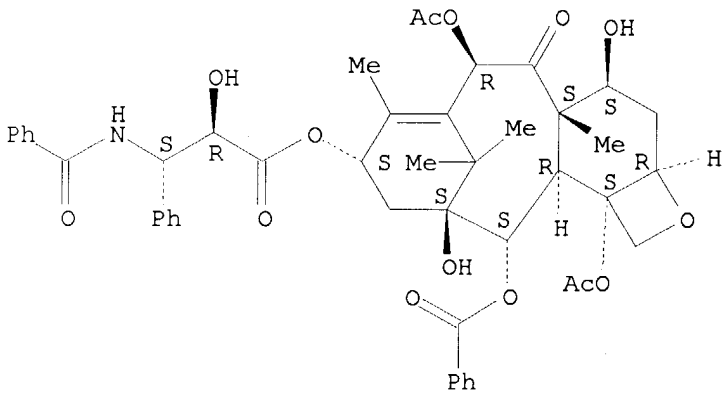
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 6 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **33069-62-4** REGISTRY
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 7,11-Methano-1H-cyclodeca[3,4]benz[1,2-b]oxete, benzenepropanoic acid deriv.
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, 6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, [2aR-

[2a.alpha.,4.beta.,4a.beta.,6.beta.,9.alpha.(.alpha.R*,.beta.S*),11.alpha.
,12.alpha.,12a.alpha.,12b.alpha.]]-
CN Tax-11-en-9-one, 5.beta.,20-epoxy-1,2.alpha.,4,7.beta.,10.beta.,13.alpha.-
hexahydroxy-, 4,10-diacetate 2-benzoate 13-ester with (2R,3S)-N-benzoyl-3-
phenylisoserine (8CI)
OTHER NAMES:
CN ABI 007
CN BMS 181339-01
CN NSC 125973
CN Paclitaxel
CN Plaxicel
CN QW 8184
CN TaxAlbin
CN Taxol
CN Taxol A
CN Yewtaxan
FS STEREOSEARCH
MF C47 H51 N O14
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB,
CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU,
DETHERM*, DIOGENES, DRUGU, EMBASE, HSDB*, IFICDB, IFIUDB, IMSCOSEARCH,
IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS,
NAPRALERT, PHAR, PIRA, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN,
USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).



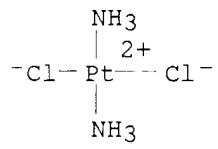
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8082 REFERENCES IN FILE CA (1907 TO DATE)
441 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8126 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 7 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **15663-27-1** REGISTRY
CN Platinum, diamminedichloro-, (SP-4-2)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

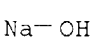
CN Platinum, diamminedichloro-, cis- (8CI)
OTHER NAMES:
CN Abiplatin
CN Biocisplatinum
CN Briplatin
CN CACP
CN CDDP
CN cis-DDP
CN cis-Diaminedichloroplatinum(II)
CN cis-Diaminodichloroplatinum(II)
CN cis-Diamminedichloroplatinum
CN cis-Diamminedichloroplatinum(II)
CN cis-Dichlorodiamineplatinum(II)
CN cis-Dichlorodiammineplatinum
CN cis-Dichlorodiammineplatinum(II)
CN cis-Platin
CN cis-Platine
CN cis-Platinous diaminodichloride
CN cis-Platinum
CN cis-Platinum diaminodichloride
CN cis-Platinum II
CN cis-Platinum(II) diaminodichloride
CN cis-Platinum(II) diamminedichloride
CN cis-Platinumdiamine dichloride
CN cis-Platinumdiammine dichloride
CN Cismaplat
CN Cisplatin
CN Cisplatinum
CN Cisplatyl
CN Citoplatino
CN CPDC
CN CPDD
CN CPPD
CN DDP
CN DDP (antitumor agent)
CN Lederplatin
CN Neoplatin
CN NSC 119875
CN Platamine
CN Platiblastin
CN Platidiam
CN Platinex
CN Platinol
CN Platinoxan
CN Platistin
CN Platosin
CN Rand
CN SPI 77
CN TR 170
DR 96081-74-2
MF Cl2 H6 N2 Pt
CI CCS, COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IMSPATENTS, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PIRA, PROMT, RTECS*,

SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



15021 REFERENCES IN FILE CA (1907 TO DATE)
589 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
15069 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L19 ANSWER 8 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **1310-73-2** REGISTRY
CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Sodium hydroxide (8CI)
OTHER NAMES:
CN Aetznatron
CN Ascarite
CN Caustic soda
CN Collo-Grillrein
CN Collo-Tapetta
CN GR
CN GR (alkali reagent)
CN NSC 135799
CN Soda, caustic
CN White caustic
DR 8012-01-9
MF H Na O
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



71219 REFERENCES IN FILE CA (1907 TO DATE)
413 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
71339 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L19 ANSWER 9 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **1310-58-3** REGISTRY
CN Potassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Potassium hydroxide (8CI)
OTHER NAMES:
CN Caustic potash
CN Cyantek CC 723
CN Potash
CN PSE 200
DR 71769-53-4, 29857-72-5
MF H K O
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

K—OH

28948 REFERENCES IN FILE CA (1907 TO DATE)
190 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
29010 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 10 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN
RN **64-17-5** REGISTRY
CN Ethanol (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ethyl alcohol (6CI, 7CI, 8CI)
OTHER NAMES:
CN 100C.NPA
CN AHD 2000
CN Alcare Hand Degermer
CN Alcohol
CN Alcohol anhydrous
CN Algrain
CN Anhydrol
CN Anhydrol PM 4085
CN Desinfektol EL
CN Duplicating Fluid 100C.NPA
CN Esumiru WK 88
CN Ethicap
CN Ethyl hydrate
CN Ethyl hydroxide
CN Hinetoless
CN IMS 99
CN Jaysol
CN Jaysol S
CN Lux

CN Methylcarbinol
CN Molasses alcohol
CN NSC 85228
CN Potato alcohol
CN SDA 3A
CN SDA 40-2
CN Sekundasprit
CN SY Fresh M
CN Synasol
CN Tecsol
CN Tecsol C
FS 3D CONCORD
DR 8000-16-6, 8024-45-1, 121182-78-3
MF C2 H6 O
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

H_3C-CH_2-OH

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

166352 REFERENCES IN FILE CA (1907 TO DATE)
1188 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
166588 REFERENCES IN FILE CAPLUS (1907 TO DATE)
11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)